

JUSTSAP 2010

Bringing Benefits of Space Settlements Down to Earth

November 2010



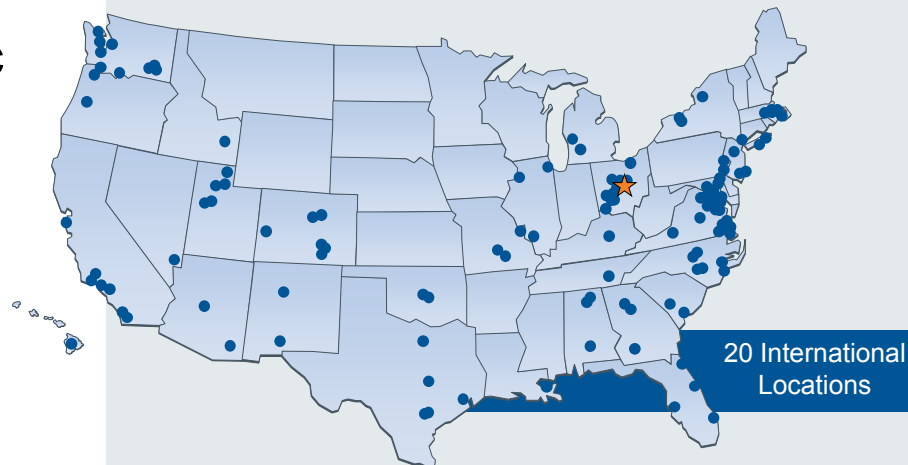
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What is the Battelle Memorial Institute?

- Non-profit, charitable trust
- One of the world's largest independent, non-profit R&D corporations
- Started operations in 1929
- Global enterprise
 - Applying science and technology to real-world problems
 - Managing machinery of scientific discovery and innovation
 - Creating commercial value by bringing new technologies to international marketplace



- Generates >\$5B annually in global R&D
- Oversees over 20,000 employees in 130 locations worldwide



Battelle Focuses on Terrestrial Applications of Space Technology

Application of Space-Based Remote Sensing to Major Societal Issues

- Agriculture and Fisheries Management
- Water Resources Management
- Community Infrastructure Planning
- Disease Vector Tracking/Modeling
- Improving Energy Efficiency
- Air Quality Monitoring
- Climate Change Monitoring
- Greenhouse Gas Monitoring
- Environmental Clean Up
- Disaster Response

Enabling Space Exploration

- Human and Robotic Lunar Exploration
- Lunar Energy Architectures
- Lunar Resource Prospecting/Exploitation
- In Situ Resource Utilization on Moon and Mars
- Advanced Closed Loop Life Support
- High Bandwidth Communications

Future Energy Solutions

- Space-Based Solar Power Systems
- Terrestrial Applications of Space Technology

Cross Cutting Technologies that Benefit both Space and Earth Applications support Sustainable Space Exploration

Synergistic Business Operations Enable Sustainability for LRDP/U

LRDP/U Operations

Serve national/international interests and provide a primary source of S&T and IP for other potential industrial clients and venture partners

Govt. & Industrial Clients

integrate the S&T and IP into innovative solutions to significant problems of clients for a fee, generating cash flow to support renewal

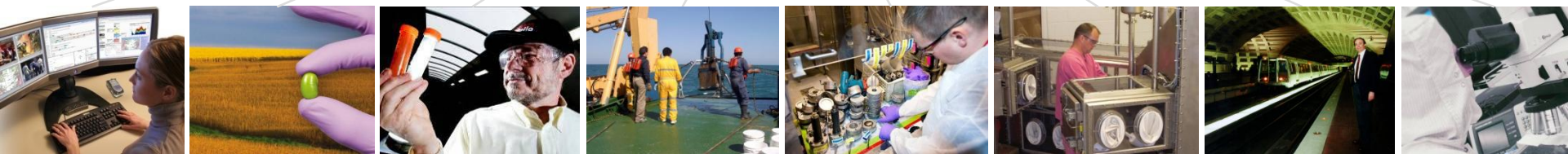
Venture Partners

provide contemporary commercial marketplace knowledge and significant financial returns for renewal and contribution to the economies of the participating nations



***Assuring
Sustainability
of LRDP/U***

Large Company & Vision



Large Network of People and Technology



Large Opportunity to Make More Impact